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TORONTO, SEPTEMBER, 1922

No. 9

The Function of the College in Promoting Mental Hygiene

BY C. M. HINCKS, *Associate Medical Director and Secretary, Canadian National Committee for Mental Hygiene.*

Paper delivered to Mental Hygiene Section of the National Conference of Social Work, Providence, Rhode Island, June 27th, 1922.

WHEN we consider the present pressing needs in connection with the Mental Hygiene Movement, we are impressed with the fact that the College is an essential factor in fostering progress. And what are some of the needs that loom large to those of us engaged in this field of work? In answer to this query one might venture to suggest at least three obvious requirements: (1) adequately trained workers; (2) an enlightened public opinion, and (3) scientific research. That the College is an indispensable instrument in regard to these needs, is evident, and much comment is no doubt superfluous. There may be some value, however, in discussing certain phases of a University Mental Hygiene programme—way and means of putting it into practice; together with an estimation of the effect upon the College, of the application of mental hygiene principles to its own organization.

Before proceeding further, reference might be made to the history of the Mental Hygiene Movement, and to indicate that the College did not occupy the position of importance in the early phases of the work as it does to-day. It is probably safe to say that the movement had its birth outside of the University. In looking back, we associate early activities with the names of individuals who were seized with the importance of the so-called psychiatric, or psychological point of view, and who, from this angle, studied problems connected with education, delinquency, dependency, pauperism, etc. There were also those who recognized the inadequacy of existing facilities employed by the State in dealing with

mentally handicapped individuals. Comparatively little technical knowledge was needed for pioneer efforts in the demonstration of two great facts: (1) that mental abnormality was a prevalent condition, contributing to much distress and wastage, and (2) that numerous reforms and considerable constructive work was required to prevent a continuation of an unsatisfactory state of affairs with regard to the mentally handicapped. While some of the pioneer workers were trained in the fundamentals of psychiatry and psychology, others were not. Perhaps this mattered little, because the great need was to attract public attention to glaring defects in our social organization and indeed the enthusiastic propagandist who had a passing acquaintance with his subject could often succeed in accomplishing his purpose. It seems to me, that we should pay tribute to the men and women of a few years back, who prepared the soil for the developments of to-day, even if their lack of knowledge sometimes led to exaggeration and to the necessity of our undoing some of their work. It is a fact that "feeble-mindedness" was greatly overdone, and that the public was given a false conception that still persists in many quarters, but we must be philosophical and remember that more good than harm was accomplished. The point, however, at issue, is that the early work in mental hygiene received neither its inspiration nor its direction from the College. Our Universities did not become an integral factor in the movement until further progress demanded the services of individuals adequately trained in psychiatry, psychology, and political economy.

It has been intimated that the Mental Hygiene Movement needs trained workers and that we look to our Colleges for assistance in this regard. There is a demand for the instruction of medical students who intend to specialize in psychiatry; for those who will follow eventually some other branch of medicine, but who need mental hygiene as an essential in their general training; for the psychiatric social worker and the general social worker; for the public health nurse; for students in theology, political economy, and law; and for those taking a general arts course. A few comments will be made about the educational needs of these various groups.

At present the individual who desires to make psychiatry a specialty can secure the advantages of training facilities that are afforded in certain mental and psychopathic hospitals. It will always be necessary for the student to gain clinical and laboratory experience in this way, but no doubt the College could assist the

prospective psychiatrist through post-graduate courses in psychiatry and psychology. I am under the impression that the average medical school on this continent can offer very little in the way of advanced work along this line of study. On the other hand, there are many institutions of learning that provide excellent post-graduate courses in medicine, surgery, pediatrics, and the other specialties.

It seems to me that great good will accrue when the medical college is in a position to furnish advanced work in psychiatry. Aside from the benefit to the individual students, there will be a good effect upon state or provincial mental hospitals. At present in certain parts of the continent, for example, our mental hospitals are really asylums, and little better than boarding-houses. The superintendents of these institutions have for the most part, received their appointments through political influences, and cannot in many instances, be considered as expert psychiatrists. This unfortunate state of affairs will continue, until there are available men who are better trained, and until such a time as it is known in the community, that what was considered satisfactory psychiatric training in the past, was often inadequate and little more than a passing acquaintance with the insane through residence with them in the same institutions. The existence of a first-class department of Psychiatry in a University, would undoubtedly raise the whole scientific level of mental hospital treatment in institutions located in the same state or province, because unsuitable appointees on a hospital staff would be recognized as such and would be replaced by better men.

The College will find an even greater field of usefulness in training the rank and file of medical students in mental hygiene, than in the provision of educational facilities for those who aim to be psychiatrists. We can look for steady progress in social psychiatry, when each succeeding graduating class in medicine from our numerous colleges is grounded in the fundamentals of the subject. One of the great difficulties of the past has been the fact, that medical men have been largely untrained in mental medicine and are today somewhat skeptical concerning the value of the Mental Hygiene Movement. In some quarters, our physicians have not only failed to furnish leadership where it was needed, but have actually blocked progress. Indeed, in some parts of the country, mental hygiene activities are fostered entirely by those outside the ranks of the medical profession. Under these circumstances, we can appreciate the significance of the opinion of a competent observer

who stated, that the greatest need of the Mental Hygiene Movement to-day, was the training of medical students in psychiatry.

The nature of a College Mental Hygiene Curriculum for students of medicine, should not occupy us here. The advice might be ventured however, that sufficient training should be granted to enable the student to make a competent psychiatric examination, and to be so informed, that he will be able to interpret, to a degree, his findings. He should also know something concerning therapy. If however, his training carries him only to that point where he appreciates the psychiatric point of view, and does not neglect to study the mental or human factors, of every case, much will be gained. Dr. Macfie Campbell and others have emphasized the important fact that modern scientific medicine has tended more and more, to the investigation of the workings of the individual parts of the human machine, with a neglect of a consideration of the reaction of the patient as a whole. The proper stressing of psychiatry in a university course will go a long way to correct this serious fault.

A certain feature of university organization may be mentioned at this juncture, viz., the relationship that should exist between the departments of psychiatry and psychology. There is no question that medical students, and others requiring instruction in mental hygiene, need tuition in psychology as well as in psychiatry. A difficulty presents itself when the two departments in question are independent and aloof. Under such circumstances, the training in psychology may be foreign to the needs of the student. In Canada, we are advocating the combination or an intimate affiliation at least, of psychiatry and psychology in one department, and have succeeded in the University of Toronto. The results in my home city have justified the move, and we find that more attention is given to clinical psychology than has been the case in the past. Since students of mental hygiene need *clinical* psychology more than instruction along lines that used to occupy the major attention of psychological departments, we are gratified with the new trend of events.

The question is sometimes asked if medical students will take kindly to mental hygiene. Our experience in Toronto may be of interest in this connection. An optional course in psychiatry and psychology was formulated two years ago, and it was hoped that twenty-five students would register. To our amazement eighty signified their desire to attend the lectures and demonstrations, and indeed the class had to be cut down. At the conclusion of the

course, there was expressed marked appreciation, and it was considered by the student body to be interesting and well worth while.

During recent years, many Colleges have made provision for the instruction of social workers and public health nurses, in mental hygiene. In the University of Toronto, and McGill University, Montreal, Social Service Depts. undertake this important work. The courses extend from one to two years and have won a place of pre-eminence in the curriculum. Already we are reaping in the Dominion, the reward of these activities. Social service generally, has been elevated to a higher plane, and no home investigation is considered satisfactory without psychiatric notes. Since, however, mental hygiene progress has been slower in the medical schools of the country, we are facing a peculiar situation in Canada. Our social workers are often better trained in Mental Hygiene than is the case with our medical profession. Perhaps this will influence the latter to hurry their steps, so that they will keep pace with the demands of the time. At any rate we are optimistic in this regard.

Experience is teaching us that short courses in Mental Hygiene for social workers are inadequate. It takes two to three years for a student to find a firm foot-hold in the subject—one of the most difficult in the university calendar. Text-books and lectures can only be looked upon as an introduction to case-work—the latter provides the real training.

Probably no branch of medicine is so dependent upon expert social service, as psychiatry. Diagnosis and treatment often require the assistance of the field-worker, but an individual who is partially trained is often of little value—sometimes indeed she is a menace. We cannot, therefore, emphasize too strongly the need for thorough instruction in this field of university work.

As yet we have not made a beginning in Canada, in the Mental Hygiene instruction of students in theology, law, and political economy. It is felt in many quarters, however, that our universities should undertake this important work. Our clergymen, lawyers and politicians, should be keen students of human nature, and would benefit greatly if they were trained in the fundamentals of psychiatry and psychology. A mere reference to needed Mental Hygiene developments in church organization and courts of law, will show the necessity of educating aright, those who are called upon to administer these activities.

In every church community there are to be found a considerable number of individuals who belong to the mentally handicapped group. When misunderstood they may fail to benefit by the reli-

gious exercises, and sometimes act as disturbing elements in the church organization. Efficiency demands their recognition and special attention where this is possible. The Sunday-school, for example, can ill afford to group defectives and normals indiscriminately, in the same classes, and experiments might well be conducted, akin to the special class organization in public schools. Any further discussion of the subject is not warranted in the present paper, but the writer is confident that the Church presents a fruitful field for Mental Hygiene, and that one of the best methods of attack will be through the training of theological students.

Much has been written concerning the application of Mental Hygiene principles in connection with our treatment of delinquents. Although many courts are utilizing the services of Psychiatric Clinics, and some progress is being made in the classification, according to mentality, of the inmates of penal institutions, nevertheless, much remains to be done in this field. The legal attitude toward mental abnormality is far removed from the medical standpoint. Legal attention is directed primarily to statutes and not to individual delinquents. However, when law students have the advantage of studying criminals as well as the criminal code, advance will surely come. We shall welcome the day when a self-respecting psychiatrist can submit honest evidence on the witness stand, that will not be so twisted and turned by opposing counsel, to make it appear that the alienist himself is either a knave or a tool of the highest bidder.

An entire paper could be devoted to the Mental Hygiene programme that the College should provide for other groups of students. Those who are enrolled in pedagogy and in the general arts course, need special attention. A study of human nature should indeed form the very ground-work for all culture. Women students in particular, require Mental Hygiene for self-application, and for the utilization at such a time when they may be rearing children. And so one might continue in showing the wide range of usefulness of the University in this regard.

Another phase of College work is that of moulding public opinion favorable to Mental Hygiene progress. The very fact that the University has placed its stamp of approval upon the Movement, carries great weight with the lay mind. The public would, no doubt, consider our activities in the nature of a fad or a frill, if we did not possess the sound backing of our institutions of learning. Indeed without this support, we would be in much the same position as phrenology, spiritualism, and the like. Our College at-

tachment, however, makes it evident that ours is not a pseudo-science, but that we are proceeding along rational lines that will stand the acid test of critical examination.

In the Dominion, we have realized the importance of the College in this connection. Our Canadian National Committee for Mental Hygiene, chose as its initial members the Presidents of our Colleges, and much propoganda has emanated from the Universities themselves. Most of our public meetings are held in college buildings, and we feel that we have benefitted greatly by this procedure. The Universities have appreciated the opportunity of fostering a great humanitarian work, and have found an outlet for community service, that they did not previously possess.

The role of the College in fostering Mental Hygiene Research is deserving of emphasis. Psychiatry is the most backward of all branches of medical science, and there is need for a vigorous programme of study that will add to our existing store-house of knowledge. The University should be in the fore-front in this enterprise. Valuable research has been conducted in Canada under College auspices, and our Canadian National Committee for Mental Hygiene, is urging the continuation of such a policy, and indeed has in some instances provided funds for the purpose.

It is doubtful if the University can escape research. Strong Departments of Psychiatry and Psychology are weak organizations if they are not continually facing the solution of new problems. Since this is the case, those of us interested in the Mental Hygiene Movement, need not urge greatly the necessity for research, but we can with advantage, keep a weather eye on the problems studied. Much investigation is of little value, because the problems attacked are of minor importance. Let us, therefore, present significant tasks for the attention of our trained university investigators. This will not always be easy. One study conducted under the auspices of our Canadian National Committee, required the space of six months for the formulation of the problem that was to be attacked.

It is interesting to conjecture concerning the effect upon the College if Mental Hygiene principles were to be applied to its own organization. In the opinion of the writer, the very complexion of our institutions of learning, might be changed, if even a limited programme were put into practice.

Our Universities, for example, proceed for the most part, upon the supposition that the mental training of paramount importance, is the development of intellect. Our standards of college-entrance

are intellectual standards. Examinations must be passed that place a premium upon range of information, and proficiency in academic subjects. The College curriculum is a category of intellectual pursuits, and the student graduating with highest honors may be merely an intellectual machine.

Mental Hygiene studies are proving conclusively, however, that the mental factors leading to success or failure in life, are preponderatingly emotional and dynamic factors, together with those elements that have to do with control and balance. When we study men of eminence, for example, we are often impressed not so much with intellectual acumen and agility, but with energy, enthusiasm, sustained activity, courage, and the like. When, too, we investigate social failures, we find in many instances, individuals, not particularly lacking in intellect, but deficient in those subtler qualities that seem to be the springs of conduct.

When once the College realizes this important fact, will there not be some shifting of emphasis in the training submitted? Surely something will be done to enhance the usefulness of students who are naturally endowed with mental characteristics that are of great value in the work-a-day world. Too often, it is true, that the College ignores these finer qualities, and may indeed inhibit them to the great future disadvantage of the individual. I have heard it said for example, that a certain man well-known in European politics would have been ruined by Oxford, and probably such might have been the case.

Certainly the whole question is deserving of the attention of University authorities. The College gains no prestige when it puts its stamp of approval upon an intellectual gymnast, who proves to be a failure outside of college walls. A friend of my acquaintance received a Rhodes Scholarship, but aside from intellectual endowment of a certain narrow character, he was otherwise hopeless. A realization of a few fundamental principles of Mental Hygiene, would put an end to such a ridiculous procedure.

These remarks should be tempered with the statement that it will always be necessary for a college to pay due attention to intellectual development, and it should also be said that the mental life is of such a complex nature, that there can be no dissection into water-tight compartments of intellect, emotion, volition, etc.

It may be said that the University recognizes the importance of the all-round mental development of its students. Is there not provided the athletic field, the common-room, the College theatre, the fraternity, etc.? Are these not influences for the development of

character and all round manhood and womanhood? The answer is undoubtedly in the affirmative, but after all the methods employed are chance methods, and compared with the attention devoted to intellectual training, can be considered haphazard.

What then needs to be done? The writer is in no position to venture suggestions. It seems, however, that a sound beginning would consist in providing facilities for the psychological and psychiatric examination of each student, and then the College would be in a position to estimate the needs of the student body as a whole. Individual investigations and advice based upon these studies would be invaluable to each student. The latter would be placed in the position of "knowing himself", knowing his strength and his weaknesses. There would result the prevention of many a mental break down, and the guidance aright to the most suitable vocation.

That psychiatric examination and advice are sometimes unduly postponed when not undertaken during undergraduate days, is known to many of us. In a certain university centre striking examples of this fact have been seen in the last few months. College graduates have presented themselves for assistance,—assistance that was needed earlier—much earlier in life. One was the case of an eminent Professor who had married a girl suffering from mental disease, and whose life was rendered almost unbearable by the unsuitable union. Another graduate known from one end of the country to the other, and married into a family in which mental disease and mental defect were prominent factors, and his wife herself was distinctly abnormal. His medical training had never included sufficient psychiatry to be of value. A slight knowledge of Mental Hygiene might have prevented these men from marriages that were bound to lead to disaster. Another case was that of a professor who had a psycho-neurosis since graduate days. Earlier treatment would have been a great boon. Three graduates sought advice because of suicidal tendencies, and one came because of a mania to set fire to buildings. Indeed, clinical records are not lacking in proof of the need of a Mental Hygiene Bureau in a college.

The individual study of 5,000 students attending a single university seems to present an impossible task. Such is not the case, however, if the proposition is considered worth while. Psychiatric work during the war demonstrated the fact that no job was too large, if it were of prime necessity.

Unfortunately group tests are of little use in the college. Professor J. W. Bridges, at Toronto University, finds the results of extensive group tests that he has conducted, to be practically without

value. Indeed the writer is convinced that a short cut will never be found to the evaluation of the all-round mental capacity of college students.

As has been said a Mental Hygiene programme for a university might begin with the examination of the student body, and as has been suggested in some quarters, a study of the teaching staff as well. With this as a beginning there would undoubtedly follow changes in College organization, that would better meet the needs of individual students.

The university that has the courage to apply Mental Hygiene principles to itself will through example exert a great influence for general Mental Hygiene progress in other sections of the community.

In conclusion might I again emphasize the important contributions that the College can make in Mental Hygiene,—(1) the training of the students, (2) the moulding of public opinion, (3) research, and (4) self application of Mental Hygiene principles.

Interpretation of the Wassermann Test

By H. K. DETWEILER, M.D., *Clinician in Medicine, University of Toronto.*

ALTHOUGH many observers, both clinical and laboratory, whose ability and professional standing are of the highest, find in exhaustive critical studies that the Wassermann test is remarkably reliable and coincides in a wonderful way with both clinical and post-mortem findings, there are others who consider that the results are disappointing and claim that in the conditions in which the clinician needs its help most, it is least accurate.

The practitioner who realizes the limitations of clinical examination in the diagnosis of syphilis, and is ready to welcome any test which will give him a clearer insight into his patient's condition, must be disturbed when he reads in the literature the varying opinions on the reliability of the Wassermann test. On the one hand, he knows that reputable syphilologists the world over acknowledge their indebtedness to this test; on the other, he finds workers who assert that it tells us we have syphilis when we haven't and that we haven't when we have. Few of the articles in question provide the data which would enable the practitioner to form his own judgment, and the informed reader must often register a wish that some such rules as the following were observed by writers on the subject:

1. The clinical evidence shall rest on examination by a thoroughly trained observer, backed if possible by an independent opinion of equal standing. It shall be revised whenever a positive Wassermann reaction disagrees with the clinical findings. The reason for this will be apparent to any one who has experienced the difficulty of excluding syphilis. How often subsequent events, other than the Wassermann test, prove a case to be syphilitic when syphilis was first excluded!

2. The serologist shall be one whose skill and experience is such as to render him as free as possible from the chance of technical errors or errors in interpretation.

Read at the joint meeting of the Canadian Public Health Association and Canadian National Council for Combating Venereal Diseases, St. John, N.B., June 6, 1922.

3. Every test which disagrees with the clinical findings shall have been repeated.

Fortunately, the number of articles in the literature in which the test is adversely criticized, is becoming fewer as time goes on, but even at the present moment all are not in agreement over this question. It is only by continued critical surveys of large and small series of cases, that the true status of the Wassermann test in the diagnosis of syphilis will ever be established. Many of us are already satisfied with the evidence brought forward in the past ten years, and I wish to present in this brief communication a summary of my own views upon the subject, reserving for a future report a detailed consideration of the data upon which such views are based.

1. Does a positive Wassermann test always indicate the presence of syphilis?

To answer this we must first define what we mean by a positive test. My remarks refer to the results of the test as performed in our laboratory, using the well-known technique which we have published on different occasions. Complete fixation with 0.05 c.c. of serum, or 0.25 c.c. spinal fluid is recorded as very strongly positive. Complete fixation only as low as 0.1 c.c. of serum or 0.5 c.c. spinal fluid is recorded as strongly positive, while complete fixation with 0.2 c.c. serum or 1 c.c. spinal fluid is regarded as positive.

We find by long experience that almost all cases of untreated syphilis, excepting certain early primary cases, show complete fixation as low as 0.05 c.c. serum. This finding has led us to believe that such a result, if persistent, is not only almost pathognomonic of syphilis, but under the conditions outlined below, one may go so far as to say that it means live spirochetes in the body. In this we are in accord with the views of many of the world's most thorough and painstaking investigators, including McIntosh and Fildes, Fordyce, Walker and Swift, the British Medical Research Committee and many others. Even in the absence of clinical signs of syphilis, a persistent very strongly positive test as I have described it, is such strong evidence of the presence of the disease that were I the subject of the tests, I should insist upon treatment.

The only other disease seen in this country that will yield such a result is, I believe, leprosy. The statement that leprosy may give a persistent positive result, I base not on personal experience, but on the reports of serologists such as I have named above, and others.

I stated above that we have found by experience that *almost* all

cases of untreated syphilis, excepting early primary cases, yield a very strongly positive result. Why *almost*? What exceptions are there to this rule?

I think the most numerous exceptions are certain late cases with central nervous system involvement. Some of these may have negative blood and positive spinal fluid. Many of us have seen cases of undoubted tabes, however, with negative Wassermann in both blood and spinal fluid. A certain number of these are due to previous treatment, the history of which the patient may or may not be able to give. But there is evidence to show that even untreated cases may occasionally be met with, with completely negative serological findings. Here the thoroughness of the clinical examination means everything in the diagnosis.

So-called latent syphilitics are believed to yield a percentage of negative Wassermann tests, variously estimated at from 54% (Muller) to 33% (Craig). Fildes claims that such figures include many treated cases.

You will notice that I have used the expression "persistent positive Wassermann test" repeatedly in the discussion *re* the importance of a positive test. The word persistent is used advisedly. I believe no one is justified in regarding a case without symptoms or signs, as luetic just because he has a positive Wassermann unless this has been repeated and found to be consistently positive. I make this statement for two reasons: First, because no human being is infallible, and while a laboratory may reduce the chances of errors in technique or of mixing specimens to a minimum, still, that minimum *does exist*; secondly, because we have learned by long experience that certain diseases tend to produce changes in the blood serum which may result in its acquiring the power to fix complement in varying degree. When this change reaches a maximum, the result may simulate very closely a positive Wassermann test. Thus we have come to recognize pneumonia in its acute stages as being particularly prone to react in this way and such a test is always repeated after convalescence has set in. To a less extent we have come to look upon other conditions in the same way, viz., pregnancy, anaesthesia, nephritis, biliary tract disease, and possibly diabetes. Usually the amount of fixation is slight and does not occasion any difficulty in interpretation, but now and then it is marked and such cases are always repeated again and again. For some reason unknown at present, such fixation has been found to be inconstant and so far as we know, repeated Wassermann tests are successful in detecting the false result.

When we first began to study these peculiar reactions, the technique being employed was critically examined, because an error in manipulation seemed to be the most plausible explanation. However, the literature presently began to record similar experiences in other laboratories, and it has come to be a recognized fact that these peculiarities do exist. Precautions such as we have outlined above, however, render it extremely unlikely that any serious error should occur.

It is worthy of note in passing, that the Wassermann reaction in the spinal fluid is even less subject to non-specific results than the blood serum. In our experience, instances are rare indeed in which fixation was found in the spinal fluid of a non-syphilitic.

It is impossible in the time at my disposal even to touch upon all the phases of the question before us, but I wish merely to mention the importance of the Wassermann reaction in controlling the treatment of syphilis. It is interesting, and above all very profitable to observe the gradual change from positive to negative under efficient treatment.

Now and then, one has the experience of receiving from the laboratory a report reading "very strongly positive" time and time again, although vigorous intensive treatment is being carried out. Such an experience is probably confined to long-standing cases and many physicians become extremely pessimistic in regard to the outlook. Some observers have applied the term "Wassermann fast" to such cases.

Some years ago we undertook to determine what was actually happening in the blood in those seemingly refractory patients. In a titration of the blood before and after treatment it was found that in the great majority there was an appreciable diminution in the strength of the test, although the ordinary test still read "very strongly positive." It is thus seen that the treatment really has had an influence upon the serological reaction although it is not as marked as one would wish.

In concluding this short paper, I wish to make it clear that the preponderance of present evidence goes to show that the Wassermann reaction in competent hands is extraordinarily reliable and consistent with clinical findings. *It is in the clinics where the most accurate records are kept, that it finds its greatest confirmation.* In a painstaking investigation of the co-relation of laboratory and clinical findings for the past five years, in the Special Treatment Clinic of the Out Patient Department of the Toronto General Hospital, just completed in our laboratory, unexplainable discre-

pancies in the test have been narrowed down to the almost incredible number of two. Granting that we have probably missed some of the discrepancies, such a low number of errors, even multiplied tenfold, constitutes a mighty testimonial to the efficiency and reliability of this famous laboratory procedure.

Nostrum and Quack Evil

BY DR. P. S. CAMPBELL, M.O.H., *Port Hood, N.S.*

IT occurred to me that this matter touched public health sufficiently closely to warrant a brief review of the Nostrum, the Nostrum Vendor, his methods and in certain cases, an analysis of what he has to offer. I do not claim any special knowledge in this field and cannot hope to offer much that is new; what I have to say is, probably, well known to all of you—nevertheless it may be well to keep the subject fresh in your minds with the hope that more activity will, in future, be directed to clearing our province of this nuisance which has, of late, assumed rather alarming proportions. That it touches the public health is or should be well known to every physician,—such being the case I offer no apology for looking into the matter with you.

My direct stimuli or inspirations for devoting some time to this phase of the health problem are three:—

First.—I have seen several fraud medicinal preparations used from time to time as well as the results following on their use.

Second.—Some of our newspapers, otherwise respectable, persist in handling those quack advertisements, the number apparently increasing as the months pass by.

Third.—Canada is becoming more and more the “happy hunting ground” for the fraud mail order concern, the fraud medical institute, and the fraud drugless healer.

Many people, who can ill afford it, are spending the little they possess on worthless and harmful nostrums—worse than that the health of many is being ruined—Still worse, I am of the opinion that lives are being sacrificed due to the poisonous mixtures recommended so freely by their manufacturers, and advertised so conspicuously in our newspapers.

Every practising physician has experienced that type of nervous individual who guzzles nostrum after nostrum in the hope of curing some fancied ill—such an one starts out organically sound, yet comes to an early death. Kidneys or other organs ruined by the irritant or poisonous preparations he has swallowed. This man

Read at the Annual Meeting, Association of Medical Health Officers of Nova Scotia, Sydney, July 4th, 1922

leaves us at a time when he should be of most value to his community. All of this we see going on about us in a very general way and for want of properly directed energy, or courage, or the expenditure of a few dollars, or what not, fail to strike out and deal the charlatan the death blow he deserves.

Our prisons are filled up with better citizens than those malefactors who play on the credulity of the people by extorting large sums of money from them for useless, fraudulent and definitely harmful preparations. All nostrums may be divided into two groups, equally fraudulent; viz., harmless drugs and injurious drugs. In preparing them full use is made of the purgations, coal tar products—the narcotics and alcohol—A nice group indeed to place in the hands of the public with directions to use freely and continuously. The purgatives may be good in their place, but if used indiscriminately may produce a good deal of harm. Narcotics will, of course, stop pain, but no one but a knave or scoundrel considers them safe remedies in the hands of the masses.

Acetanilid, which was the base of many, notably the headache powders, will sometimes relieve headaches—but if taken as the advertising matter directs—may affect the heart permanently as well. Many deaths have been caused by its continuous use.

Alcohol sold without restriction does not tend to promote good health or citizenship, but on the contrary intoxication with its attending ills. All of these are habit-forming and as a result most detrimental to the public health.

The quack campaign is almost always launched through the press—the business being a profitable one, the promoter can well afford to purchase much of the advertising space and at the highest possible rate. Many of the ads. are designed to entice the person who suffers from an incurable disease; here is found the ideal victim; the chronic progressive disease stimulates the sufferer to experiment with cure after cure, (the promise of relief being “half revealed and half concealed” in the press advertisement), thus the poor unfortunate buys the fraudulent nostrum thereby forfeiting his only chance of recovery, by neglecting those things which tend to help him until he arrives at a stage when nothing will avail. Look carefully through the fake advertisements of the average daily paper and you must conclude that the covetousness of the publisher and the gullibility of the public are limitless. The only argument for justification the newspaper owner can offer is, that the advertisers and not himself, are responsible for what appears in the advertising columns.

Next to the advertisement comes the testimonial as a seller for the patent medicine. These testimonials are ingeniously arranged and carefully distributed to the prospective customers. So nicely are they worded that the public is deceived into believing they are of great value and represent the honest opinion of intelligent people who have been cured and out of sheer gratitude send the glad tidings to the medicine man, in order that other sufferers, less fortunate than they, may also be brought back from the grave. The truth about testimonials is: Almost all of them are solicited. A few may be genuine on the part of the giver, but these are worth nothing inasmuch as they represent the opinions of persons of low intelligence and who have been cured by nature's methods and not by any remedy contained in the fake medicine. Others emanate from a certain class of conceited individuals, with poorly developed gray matter, who desire to see their names in print with possibly a photograph alongside. Others again are secured in exchange for a few bottles of the medicine. A great many of them are bought, clever solicitors being sent out to extract them from the unthinking—One thus secured from a man of prominence being worth much more than one from the man of the street.

Lastly, there are the testimonials from so-called eminent physicians to which the quack so loves to give a prominent place. Of these it may be said some are faked, some twisted out of shape and the balance come from physicians of no standing in the profession. In general it may be said that all testimonials are paid for in one way or another.

Before passing on, and in order that there shall be no misunderstanding, it might be well to define the term quack. Look up any small dictionary and you will find some such definition—"Boastful pretension to skill which one does not possess, especially in medicine." This is not complete enough, the following is a more remarkable definition: Any person who advertises a cure or treatment for any disease, who issues testimonials, who identifies himself with a secret or mysterious preparation, or who diagnosis or treats, (by mail) those whom he has never seen, is a quack. Any person who puts forward boasts, or advertises a special method, system or cult is a quack: any paper, medical or otherwise, which endorses secret, mysterious or fake remedies or cures is a quack publication; Any institution that advertises by publishing testimonials or approvals of any kind (excepting possibly in a medical journal) is a quack institution. In dealing with this quackery business, it is possible to make at least a partial classification: for example, there are—

Tuberculoses cures
Cancer cures.
Female disease cures.
Male disease cures.
Epilepsy cures.
Deafness cures.
Kidney disease cures.
Drug cures and drugless cures.

and a long list of miscellaneous cures, both drug and mechanical.

I shall now deal, in detail, with a few preparations confining myself to those most advertised locally at present. The first then to suggest itself is "*Tanlac*". This is a nostrum with which you are all thoroughly well acquainted, thanks to several of our progressive newspapers and to many of our druggists—especially Kinley's, Limited, Halifax. This preparation manufactured by the Cooper Medicine Co., Dayton, Ohio, was originally called "Cooper's New Discovery." Perhaps when the term "*Tanlac*" shall have worn out, it may appear under another name and continue to gladden the hearts of the people, while incidentally relieving them of their surplus cash. The exploiters of this mixture claim that with other things it contains a plant discovered by Cooper's uncle, "a Scientist," and that the services of a "German chemist" are made use of in preparing the ingredients. It is sold as a tonic and system purifier. The usual air of mystery surrounds the discovery. It depends for its sale chiefly upon the ignorant and weak-minded, the bait being testimonials. Of these testimonials some are faked, some paid for and almost all come from people who know little or nothing about disease or recovery. The chemists of the "Michigan Food Department" analysed "*Tanlac*" and found it to contain—

Alcohol 16.4 per cent.
Glycerine 2 per cent.
Licorice present.
Aloes or Cascara—present.
Gentian—present.
Alkaloids (Berbarin) a trace.
Tartaric acid—trace.

It is thus essentially a wine to which has been added some bitters and laxatives. The presence of a fair percentage of alcohol makes it easy to understand why it should be so popular in a prohibition country.

It might interest the newspaper owners and drug store proprietors of this province, who are pushing the sale of "*Tanlac*" to

know, that, the discoverer of this wonderful panacea, viz., L. T. Cooper, is a convicted fraud, he having pleaded guilty to an indictment in Kentucky some years ago. I suppose it is hopeless to expect druggists and newspaper proprietors who are sharing good profits, to be affected by being brought "face to face" with facts regarding "Tanlac" or any other universal cure all.

Lydia E. Pinkham's Vegetable Compound.—The *Halifax Herald* of March 20, 1922, contained a testimonial said to be written by Mrs. F. P. Hansen, of Wisconsin, advising all women with female troubles to use this compound. A note at the bottom of the Ad. says, "If you are suffering from troubles that sometimes follow child birth, bear in mind that Lydia E. Pinkham's Compound is especially adapted to correct such troubles." Here again is a preparation which depended upon alcohol for its popularity, analysis by the British Medical Association was as follows:—alcohol 19.3% by volume, 0.67 solid substance, ash 0.06% traces of tannin and ammonia and a small quantity of reducing sugar—no alkaloids. Here then is another valueless preparation kept on the market for about fifty years by means of lying advertisements and worthless testimonials.

Cancer Cures.—Most of the so-called cancer cures are of two kinds—first, those which consist of an external wash with drugs for internal administration, and second, plasters or pastes containing caustics or escharotics to be applied to the cancerous surface. It is safe to say that all belonging to the first class are either absolutely valueless or definitely harmful. Even if they are not in themselves harmful, the patient is led to rely on them until the cancer reaches a stage where no treatment will succeed. The pastes, have, I believe, been used by some reputable physicians, in selected cases of cancer, but even in such cases the treatment is anything but certain. When persons are treated by those pastes through the mails or in the hands of one who has had no medical training—the cure becomes at once alarmingly dangerous.

In the *Halifax Chronicle* of March 27, 1922, I noticed the following advertisement: "Goitre, Cancer—Tumor—"Purifico" "Send for book of Sworn Statements." Signed C. W. Diffin, Bridgeburg, Ontario. I did send and promptly received a book of testimonials and a letter signed by Diffin—advising me to begin the Purifico treatment at once. Here is a sample testimonial many of which approach the ridiculous: "The doctor gave me but two weeks to live. This was four years ago. I had been in hospital six weeks and the doctors there decided I had cancer of the stomach and sent

me home to die. A neighbor brought me some Purifico—I started to take it and inside of a week I was able to eat some and felt better in every way. To-day I am a well woman, able to do my work on the farm, and the lump in the stomach is all gone." Signed Mrs. C. P. Jensen, Pierson, Manitoba, December, 1921.

According to Diffin's literature—"To Dr. Eleanor E. Burnside, of Buffalo, N.Y., belongs the honor of perfecting the Purifico remedies, to which she gave years of study. The doctor is a graduate of the New England Female Medical College, class of 1867, and an honor student. There are three numbers to Purifico, one, two and three, to be taken internally and, of course, the antiseptic wash. Single bottles cost \$5.15—six for \$25.15. I am indebted to the American Medical Association for the analysis of this life-giving Purifico. It is as follows:—"No. one, 10% alcohol, with sugar, small amounts of glycerine, potassium Iodide, cinchona alkaloids, piperin and emodin (probably senna). No. two, 9% alcohol, sugar, small amounts glycerine, potassium Iodide, cinchona alkaloids and piperin. No. three, 14% alcohol, sugar, valerian, piperin and tannic acid. All these products falsely and fraudently advertised." I leave you to judge of the value of those preparations as Cancer Cures.

In the county of Inverness we are "fortunate" in having a cancer paste vendor, in the person of a man who has had no medical training whatever. The formula of his paste is, of course, a profound secret and it would be unholy and impudent on the part of anyone to endeavor to find out the constituents. It was my privilege to meet this man not so very long ago; the occasion being a call I received to come, at once, to a certain home. Arriving there I found the cancer man had been at work—and had scarcely entered the room when patient and quack told me, in unison, that "the cancer treatment was quite successful, but unfortunately erysipelas developed which disease they would be glad to have me treat." I thought a lot, said little and succeeded fairly well, in controlling my feelings. Examining the patient I found the doctor, so called, had been applying his plaster to an area of the face which, according to his diagnosis, was cancerous. I further discovered a spreading infection extending from the neck to the top of the head, no doubt due to some one or more of the pyogenic organisms and most likely introduced by this operator, whose knowledge of asepsis and antisepsis must have been as profound as his knowledge of cancer or tumors in general. I was not able to confirm either the diagnosis of cancer or of erysipelas. Having done what I considered proper for the patient and while saying

a word preliminary to leaving the house, the patient said, "perhaps you have never met this cancer doctor before"; to my reply in the negative he gave a formal introduction—remarking that "being both doctors, in the same business and doing the same work we should know each other better." You can imagine my feelings now. Insult added to injury—to be accused of being in the same business as this itinerant cancer paste vendor was too much! It was as "the last straw to break the "camel's back." Needless to say "I stood not upon the order of my going, but said at once good night."

How serious this matter is none but the trained physician can appreciate. It would be humorous and ridiculous if human lives were not at stake. That mail order concerns and travelling quacks, who have nothing but cleverly worded or lying advertisements, testimonials fake and otherwise and colossal ignorance to offer can deceive so large a percentage of the people, illustrates well the astounding gullibility of the public.

Consumption Cures.—Some two years ago I was called far into a rural district to see a young girl of 19 or 20 years, whom I found to be dying of pulmonary tuberculosis. She was then finishing up the third refill of a damnable nostrum at twelve dollars a refill—believing, as the quack literature stated, that a few more bottles would cure her. Her people were extremely poor, nevertheless they managed to rake up the twelve dollars whenever, according to the "follow up" literature, the requirements demanded it.

Of all branches of fakery the consumption cure branch is one of the most profitable and at the same time the most despicable. In consumption the mental factor probably plays a more important part than in any other organic disease. Here hope is relied upon to a most exaggerated degree. Every physician who has treated consumptives knows this. A little change in treatment or change in physicians may be all that is necessary to bring about a temporary improvement. The quack makes complete use of this mental instability to extort large sums of money for either a worthless or a definitely harmful nostrum. This is tainted money—worse than that it is blood money! So vile is this trading that it appears to me the devil will never have all his specially chosen people about him until he gathers in those who have been, who are now and who will be engaged in the manufacture and exploiting of quack consumptive remedies.

Now I shall pass on to the consideration of a mechanical cure—a good type being the J. B. L. Cascade.

A few months ago a man came to consult me for symptoms which were referable to an enlarged prostate. He told me he had taken an internal bath and seemed amazed that he was not better as a result of it. To my questioning about the internal bath he again seemed amazed, but this time at my ignorance. About the same time I saw an advertisement in the *Halifax Morning Chronicle* which was headed "No more sleepless nights—finds health in internal bathing." Then followed testimony from a user of the Cascade saying he had been cured of indigestion—nervous debility, insomnia and allied troubles by this advice. Then the pregnant message that the Cascade was being shown and explained at W. H. Stevens', Dartmouth, and Kinley's Ltd. Drug Store, Halifax. "Write to them for free booklet or to Tyrrells' Hygienic Institute, Toronto." I wrote the Institute and received a reply from the Canadian Manager, testimonials, diagnosis chart form and literature on the internal bath. The letter said in part "to send for the treatment in order to bring health, comfort, contentment. Remember, besides the treatment, which is dispensed in strict accordance with professional ethics, you may consult Dr. L. E. Pineo (well known as a New York Specialist), either by mail or in person." The treatment consists in the administration of rectal enemas of a so-called antiseptic tonic placed in the Cascade. The Cascade itself is not unlike an ordinary rubber hot water bottle with a rectal tube protruding from one of the flat sides. The modus operandi is as follows:—Fill up the Cascade with the tonic, insert the tube in anus, sit on the rubber bag and the weight of the body forces the liquid into the rectum. This piece of apparatus is said to have been invented by one Charles A. Tyrrell, an "eminent" physician of New York. Said Tyrrell also brought forth a new theory of disease and its causes, it is this:—"There is only one disease, but with many manifestations; there is only one cause for disease and that is auto-intoxication." This theory was probably originated to help sell the Cascade. It makes one think that "ignorant physician" would have been a better term to apply to Tyrrell than "eminent physician." The Cascade was in reality invented by H. M. Guild and patented in 1903. Later on the patent was assigned to Tyrrell, yet Tyrrell himself claimed to be the inventor.

The Journal of the American Medical Association in 1917 gave a "write-up" of Tyrrell in part as follows:—

"He received a diploma from the Eclectic Medical College, New York, in 1900 when he was 57 years old. He was president of the concern that sold the "Ideal Sight Restorer" (a notorious fraud)

as a cure for most eye-ills. Tyrrell also appeared in the role of publisher and "editor-in-chief" of a quasi-medical magazine, *Health*. He had for associate editor C. S. Carr, the quack. This magazine reeked with frauds, etc., etc." Tyrrell claims that the "Cascade used in health will prevent disease and used in sickness will cure any curable disease." "That his treatment is endorsed by distinguished physicians." "That the antiseptic tonic is a most important feature of the treatment." The facts are it will neither prevent nor cure disease, and it is not endorsed by leading physicians. The antiseptic tonic is a solution of common salt and borax. The J. B. L. (meaning joy, beauty, life) Cascade costs twelve dollars. A fountain syringe or common irrigator either of which will do everything the Cascade outfit can do and with much greater safety, costs \$1.50.

Eye Medicines.—Bon-opto. This preparation is largely advertised in our press at present. Said to make "Weak eyes strong"—strengthen the sight 50 per cent. in a week. Recommended by prominent physicians" and other false claims. Analysis found it to contain Sod. Chloride, Zinc Sulphate, Boric acid and a small amount of menthol.

Murine.—The Halifax *Herald* of March 20, 1922, ran an advertisement recommending the use of Murine as an eye remedy. Analysis by the American Medical Association found in it 12 grains of borax to the ounce, a trace of berbarin or golden seal. It sells, I think, for one dollar an ounce, a fair price for 12 grains of borax. The promoters of this nostrum, B. McFatrich, M.D. and C. W. McFatrich at one time operated a spectacle-fitting business in Chicago.

While on the eye it might be well to say a word about that humbug who travels about the country peddling spectacles. Such an one usually succeeds in convincing many people that he possesses wonderful knowledge relative to the eye. Of course his main object in life is to sell glasses at a splendid profit. As a result of his administrations a good many eyes are likely ruined.

Kidney Remedies.—A good type of this class is found in Dodd's Kidney Pills—"for all kidney complaints." These are widely advertised and widely used. The accompanying literature works to the full the bogey of "Pain in the back means kidney disease." Dodd's pills contain jalap, hard soap, pot. nitrate, sod. bicarbonate, hard paraffin and wheat flour. Then there are Doan's Kidney Pills, or commonly called "backache pills." They contain, in addition to pot-nitrate, oil of juniper and hemlock pitch.

Before closing permit me to say a word about a comparatively new branch of quackery, viz.: Drugless Healing. Of late years the medical profession has been devoting considerable time to non-medical treatment. This has inspired the quack to get busy and turn this department into a money-making business. From time to time schools of drugless healing come into being and after successively deceiving the public, they have the effrontery to look to the Legislatures for recognition. The graduates of those schools, possessing no real training, but instead cheap diplomas, scatter about the country and pose as persons competent to treat diseases. Their clients are drawn almost entirely from the ignorant and neurasthenic classes which represent a fair percentage of our population.

In the foregoing pages sufficient has been said to justify one in concluding that in the "nostrum and quackery evil" lies a definite menace to the public health. Such being the case it is up to the physician to officer the public and carry war into the frauds' camp. In this physicians will be accused of being in bad faith and of being actuated by selfishness by the patent medicine makers. This is the weakest possible kind of argument—for with quackery and the nostrums rampant, the physician necessarily gets more patients. For every ten who are led to believe they are sick through reading exaggerated and lying advertisements, it is safe to assume at least one-half will consult physicians rather than apply to the quacks themselves. Every doctor knows that the reading of fake medical advertisements brings many patients to consult him. Such as the one with a transient pain in the back who has been led to believe that a serious kidney affection is his, or the one who has been terrified by the flaring "lost manhood" literature. To further supply the remedy let our medical societies devote space in the journal to exposition of the various frauds. A propaganda department in the Canadian Medical Association would help very materially. Let us begin right here—there are sufficient medical health officers present to make a splendid start. Let each one return home with the determination to do something to stem this evil. In this phase of the public health work our nurses can work wonders in the school as well as in the home. Of all the means to be employed perhaps education of the public is the most potent and since all education must begin with the little ones attending our schools, the opportunity for our nurses is apparent.

Get after the newspaper publishers whenever an occasion presents itself. Show them the harm they are doing and the good

they are capable of doing by refusing to print anything that savors of quackery in their advertising departments. Take away the press from the nostrum vendor and forthwith his business passes out of existence. Let it be our ambition while endeavoring to clear our province of preventable disease, to clear also this great nuisance thus safeguarding the money, health and lives of many of our citizens. The money spent on nostrums in this province alone would, I think, be sufficient to maintain a most efficient health department and to boot we should have a healthier and happier people. Let us then take as our slogan: "Away with Quacks and Quackery."

My thanks are due the American Medical Association for analysis of preparations and other valuable information in preparing this paper.

Vitamines

BY ADAM H. WRIGHT, B.A., M.D., *Chairman of the Board of Health, Ontario.*

IN speaking of foodstuffs we shall make no reference to Nem. Feeding which is carried out by what is known as the Piquet School. The word nem is composed of the first letter of each of three words—"Nahrung einheit milch (nutrition similar to milk)—considering mothers' milk the basic food. This system seems admirably adapted for children, while our observations in this paper will refer especially to those who have passed the childhood period.

We shall consider the following constituents of food:—proteins, fats, sugars and starch without reference to inorganic salts and water. In connection therewith we shall speak of vitamins and calories endeavoring to talk in a way suitable to the public or popular ear, i.e. in a common sense manner.

VITAMINES.

In attempting to define the word vitamins a difficulty at once confronts us; we don't know what they are. A patron spoke crossly: "Say, waiter, what are those black specks in my cereal?" Waiter (after a close inspection)—"Donno, sir, unless it is some of them vitamins every one is talking about now."—*Life*.

Robert Hutchison says in part (Medical Annual, 1920): "Vitamins are bodies of unknown nature which though only present in minute quantities in food are yet essential for healthy nutrition.

Cecil Owens explains (The Prescriber, May, 1920), that while the food factors (proteins, fats, carbohydrates, etc.), are all necessary they alone are not sufficient to maintain life. Certain accessories are required, and for the present the common custom is to call them vitamins. The value of these is illustrated by one experiment; rats were fed on a mixture of caseinogen, starch, sugar, lard and inorganic salts—all carefully purified; results, decline and death. The rats were then fed for a limited time on this "pure"

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nutritious diet; result, rapid decline. Then a small allowance of milk with the result that the animals again flourished.

Some say vitamins exist, but have not yet been isolated. Owen says their existence has not yet been demonstrated, yet he seems to have no doubt as to their real being. Let us consider that they exist, whatever they may be, and give a brief outline of present opinion regarding them:

There are three varieties of vitamins, A. B. C.

- A. Vitamins: found in cod liver oil, butter, lean meat, liver, kidney, whole milk, cheese, eggs, fish, beans, cabbage, lettuce, spinach, carrots, nuts.
- B. Vitamins: found in yeast extract, dried yeast, lean meat, liver, kidneys, milk, cheese, eggs, wheat, peas, cabbage, lettuce, spinach, bananas, nuts.
- C. Vitamins: also called anti-scorbutic vitamins; found in lemon juice, orange juice, lean meat, liver, raw milk, cabbage, carrots, cooked potatoes, fresh beans, fresh lime juice, raspberries, apples, tomatoes.

Absence of A. causes rickets; B. beri-beri; and probably pellagra; C. scurvy.

Of these deficiency diseases rickets and scurvy are important; but the former is a constitutional disorder of childhood, generally preventable by proper feeding, but in this paper we are referred to adults and especially those over forty.

Dr. Hastings, M. O. H., Toronto, has happy methods of combining the scientific and practical and telling the public many wise things in a simple and understandable way. His April *Bulletin* is excellent. He recalls a statement made by Dooley years ago: that, after having experience with both Christian Science and modern surgery, he concluded that if Christian Scientists had a little more science, and surgeons a little more Christianity it would not matter much which you would employ if you had a good nurse.

We are glad to know that the Toronto Health Bulletin is appreciated and carefully read by a large number of people. In the April issue Dr. Hastings, after referring to the importance of a properly balanced diet, careful selection and good cooking of foods says: We should consume each day 3 to 4 ounces of proteins, or muscle building material, such as meats, eggs, milk, cheese, peas, beans, etc.; about the same amount of fats, such as butter, cream, fat meats, etc.; and about one pound of carbohydrates, such as starch and sugar, with fairly large amounts of vegetables, especially green vegetables which contain vitamins in abundance. The

vitamines are found originally in green leaves and vegetables. Dr. Hastings very wisely adds: we should *get our vitamins from our daily food supply*.

This seems simple and it ought to be difficult in any ordinary dietary to exclude the "infinitesimal" amount of vitamins required. Vitamins seem to bear the same relation to the body nourishment that the sparks do to the carburetor. I forget who first gave this apt illustration, but I am quoting now from *Clinical Medicine*, May, 1922. We are told, however, by Richard and MacKinnon (Glasgow) *Med. Jour.*, page 336, 1921) that scurvy does rather frequently occur in Glasgow and Edinburgh from faulty diet, mostly in males, the majority of whom lived in model lodging houses, where they bought and cooked their own food. Some of them did not "bother" with cooking vegetables, and their flesh food was always fried. Many of them lived for long periods on a diet mainly of tea, bread and margarin, sausage, ham, and tinned meats. Some kinds of white bread had no vitamins, margarin has none. The vitamins in the fried and tinned meats were probably destroyed by heat. As the use of margarin is much discussed, now let me say that vitamins are not found in vegetable margarin, lard, olive oil, cacao butter, linseed oil or hardened fat, but still these in their own way are all good foods.

The discovery of vitamins created great interest, and caused in the minds of many—both medical and lay—great expectations never quite realized, and also some mistakes, which did harm. One prominent English physician said about five years ago: "There are some principles called vitamins, which though present in abundance in most uncooked foods are nevertheless absent in foods which have been subjected to any culinary process They are of vital importance both to the very young and very old. Those with feeble digestions should be encouraged to take such foods as are known to contain them in relatively large quantities." This statement covers a good deal, and was for some years accepted, in its entirety, by a large proportion of dietitians in both Europe and America (including Canada.)

But the statement is full of errors as perhaps the majority of physicians formerly mistaken have discovered.

1. Vitamins are not absent from all cooked foods, although heat injures them and sometimes destroys them, as already mentioned, especially in certain fried and tinned meats. But a good cook can use much heat and still furnish satisfactory foods.

2. Vitamins, so far as we know now, do not directly help

feeble digestion, although it must be admitted that in the complete absence of vitamins neither digestion nor any other vital process can proceed.

3. No one should be "encouraged to take in large quantities foods known to contain vitamins."

Perhaps a cursory consideration of our homely democratic old friend cabbage will illustrate certain points better than a prolonged argument. The only food which, so far as we know now, is rich in all kinds of vitamins is cabbage. But we cannot live on cabbage alone. If it were possible to do so one would require to consume fifteen pounds a day in order to obtain sufficient energy units to keep him alive. You need only the live spark in the human carburetor, and if one-quarter of a teaspoonful of raw, or a full teaspoonful of cooked cabbage be sufficient for the requirements, it is surely unnecessary and unwise to take two or three tablespoonfuls of either raw or cooked cabbage unless your digestive powers are equal to the occasion.

The food problem is very important and complicated. This appears to be better appreciated in the case of children than in the *grown-ups*. But the difficulties of providing for adults after forty are greater than for infants and children, and these difficulties increase with each decade, especially after fifty. The mother should understand that while indigestion is serious in her baby it is much more so in her husband, and when the latter goes off color she should immediately hustle him off to a physician, preferably the family doctor if by good fortune her household happens to possess such a commodity. The alimentary canal is intricate in infancy and becomes still more complex in middle and old age. The everyday physician can help much by curing what are frequently termed the "trifling ailments" of the stomach, liver and bowels, which are too often quite serious.

Because we have pointed out certain fallacies regarding both professional and public opinion, we have no desire to cast any doubts as to the existence of vitamins, though still of unknown nature in a chemical sense (Hopkins, Cambridge University); On the contrary we believe, perhaps I should say, we know they are of extreme importance, "essential to nutrition, and even to life itself, though they have no intrinsic food value of their own" (Sir James Barr.)

It happens fortunately that directions as to properly balanced meals given by practically all modern dietitians are simple in character, easy to follow, and when our meals are prepared accord-

ing to the rules laid down they will contain 100 per cent. of the vitamins required. And we can have this without any additional cost—perhaps with less cost if we eat less meat and more vegetables. When we do this we are following Dr. Hastings' recommendation to get our vitamins from our daily food supply.

In order to give emphasis to valuable advice we may add something to the remarks before referred to regarding the balanced meals. Let those who have passed 50 (no harm to many if they commence before 50) diminish the quantity of meats in their diet, and take plenty of the foods which contain the antiscorbutic vitamins, viz., raw cabbage, cooked cabbage, lemon juice, orange juice, runner beans, carrots, beets, cooked potatoes, onions, grapes, raspberries, apples, other fruits, with perhaps the admixture of some other foods containing chiefly fats, starchy matter, sugar and some proteins in addition to or instead of the meats before mentioned. This list is intended especially for dinner.

For the other two meals—breakfast and luncheon or supper, choice may be made from the following: cereals with cream or milk, toast and butter or bread and butter, tomatoes, salads, eggs, cheese, junket, fruits, cooked, preserved, canned or raw, and any of the other foods in the anti-scorbutic class as mentioned above.

We know but little about the vitamins and yeast preparations now advertised, but we quite agree with Dr. Hastings, other food experts and most of the leading medical journals that the proper methods of getting vitamins is from the daily food supply. Concentrated foods are always of doubtful utility—if not generally harmful.

We think it fortunate that the general public and all dietitians are taking a great interest in this subject and are conducting investigations in a scientific and practical way, and we should not be discouraged about the present limitations of our knowledge. "It is precisely because science is never sure of anything that it always advances." (Pasteur.)

Dental Hygiene

BY DR. H. W. BLACK, D.D.S., *Sydney, N.S.*

LATE President Roosevelt, in addressing Health Officers, State of New York, said,—“It is the prime requisite of every nation to have every man and woman effective units. Men cannot be effective, they cannot be good, unless they are healthy. You public health men are dealing with the basic problem of citizenship.”

Dental Hygiene and its relation to the public health of our country is to-day much more closely associated with the Medical profession than was even dreamed of only five or eight years ago. The results of the efforts of those engaged in Dental research, have brought to light a solution for many of the problems which have heretofore baffled the wisdom of the most eminent of the Medical profession.

Shortly before his death, Sir William Osler, in addressing the members of the Royal Dental Hospital, London, said,—“One of the greatest discoveries in medical science in the past ten years is the relation of diseases of the mouth to other diseases of the body.” “If I were asked,” said Dr. Osler, “which is the more detrimental to the health of the nation, alcohol or bad teeth, I should unhesitatingly say, bad teeth.”

Health Departments, local, municipal and federal are to-day bending every effort to save the baby realizing a nation's greatest asset is a healthy child and in this movement tremendous strides are being made, but when we consider such statistics as provided by Dr. Wiley, pure food expert of New York, who says of the two and a half million babies born in America last year at present rate of mortality one-half that number have got to die before they reach the age of 23. Surely it behooves the authorities entrusted with the care of the health of our people to bend every effort to remedy this shocking state of affairs.

To-day we know on the authority of such leading men engaged in medical research as Cotton, Irons, Fitzgerald, Copeland, Bellings, Davis, Rosehow, Lyman, Fink, Price and Hunter that focal infection having its origin in the mouth such as abscess at the end of

Read at the Annual Meeting, Association of M.H.O.'s of Nova Scotia, Sydney, July 4th, 1922.)

roots of teeth, pus pockets in the gums caused by tarter or irregularity or that curse of the human race from the dental viewpoint, Pyorrhoea, any or all of which may be the actual or contributing cause of such dreaded diseases as Brights, Diabetes, Gall Bladder, Gastric Ulcers, Anaemia, Rheumatism, Pericarditis and Endocarditis, Auto-intoxication, Nervous prostration, Sciatica, Neuralgia, Neuritis, Arterio Sclerosis, Goiter, Epilepsy, Insanity, Consumption, Facial Eruptions and numerous other disquieting dangerous or disfiguring disorders. "Cancer of the mouth," says Dr. Bloodgood of John Hopkins will be a thing of the past when the public understand and act on thorough mouth hygiene.

After many years of inspection and work with the children of our public schools, we find 90 per cent. of the children of school age have serious conditions arising from neglected decayed and abscessed teeth rendering proper mastication impossible and the pus absorption a most deteriorating and degenerating force to overcome. In many cases dull and apparently mentally deficient children are rendered normal by the removal of diseased teeth. At our local school clinic where 921 cases have been treated and 3,000 operations performed, it is an every day occurrence to find six year molars so badly abscessed as to produce a serious necrosis condition of the maxillary bones which in not a few cases involves the Antrum. Without surgical intervention in such cases permanent, and perhaps fatal debilitation must follow. Last year in New York City 67,000 children failed to pass examinations because of lost time from school, 80 per cent. of which was due to tooth troubles. The cost to the School Board of New York City for repeating the work of that year was \$1,100,000. Such statistics are to a large degree applicable to every town and city in our province. Heart trouble among children is to a very large extent the result of pus absorption from infected teeth. Dr. Irons, heart specialist of Chicago says of the 105,202 deaths last year in the United States from heart disease, one-half were due to diseased teeth; while Dr. Cotton, Superintendent of State Hospital for Insane, Trenton, N.J., says 50 per cent. of the cases coming under his care are due to Auto-intoxication resulting from an abscessed or pusy condition arising in the mouth, immediate result being obtained by removal of source of infection.

Many cases of acute mental depression are nothing more than toxemia having its origin in the oral cavity. In such cases the most expert dental advice available should be sought as so frequently the termination of such neglected cases is suicide.

Few diseases are more closely associated with oral infection than is consumption. While this disease may be primary, yet in very many cases it is secondary, the primary being oral infection such as infected tonsils, abscessed teeth, pus pockets in gums or pyorrhoea. During childhood where teeth are badly infected the tonsils are frequently in the same condition.

Anaemia thus caused so lowers the vitality as to render resistance to the tubercular germ impossible. Dr. Graham of Detroit says in every case where the haemoglobin count is below 70 and cannot be accounted for as temporary such as pregnancy or acute illness, we are not justified in placing the additional burden of infected teeth on the metabolism of such a patient. Dr. Graham says further, "Abnormally high or low blood pressure is usually the result of a toxemia or infection. Clinical experience has time and again shown that focal infections from dental organs are causative factors in abnormal blood pressure and the elimination of the infection wherever found is the logical procedure."

Judge Lindsay says Court Statistics show criminality in many cases, particularly in the juvenile, is due to a degenerated mental condition brought about by unhealthy conditions of the mouth. Institutions for punishment of all such criminals, both juvenile and senior, should have the most scientific dental advice available and part of the sentence imposed by the judge should include the order to have the mouth of the delinquent or criminal placed in a perfectly healthy condition. The two-fold result of such a sentence is obvious.

While I have scarcely scratched the surface of this tremendous subject, I hope you have been in some degree impressed with the importance of modern dental hygiene as a factor in the solution of the problems of public health. Such conditions in everyday medical practice, as are here mentioned, emphasize the need of closer relations between the modern medical and dental practitioner, and in the diagnosis of all cases of obscure infection, the importance of the invariable use of the dental X-ray.

Had time permitted I should have dealt with the last annual report of the dental department of the Kentville Sanatorium. I commend this report to the serious consideration of the health officials of this province, as it bears out the striking intimate association of dental infection with tuberculosis. The treatment of 951 cases of pyorrhoea from so small a selected gathering of people bears shocking evidence of the close relation existing between such mouth infection and tubercular trouble.

Now that the time allotted me is gone, I wish briefly to make a few suggestions from the dental viewpoint as a means of prevention of this condition, which is known to be directly or indirectly responsible for so large a part of the sickness and mortality of to-day.

First.—Through health centres, teach the prospective mothers to eat proper food and live properly, remembering the dental organs are in course of development from the seventh week of pre-natal life.

Second.—Teach the public the value and combination of foods required by children to produce strong dental organs, ever emphasizing the need for care of these organs from early childhood.

Third.—Provide municipal or Red Cross Dental Clinics for the under-privileged children and adults of the same class.

Fourth.—The appointment of a consulting dentist or dental board of the foremost dental practitioners of our province to act with the medical advisers to our municipal and provincial institutions, particularly the Sanatorium at Kentville, and the Nova Scotia Hospital for the Insane at Dartmouth.

Fifth.—The appointment to the staff of these institutions one or more modern dentists who must possess special aptitude and training for this class of work.

In conclusion I wish to say we do not claim all cases treated for septic disturbances have been cured by the removal of oral foci, but clinical reports of the past five years have proven beyond a shadow of a doubt that a very considerable percentage of the ill-health is directly or indirectly the result of oral sepsis.

I thank you, Mr. President, for this privilege of addressing this Association of Health Officers of our province and assure you of the fullest co-operation of the dental profession of Nova Scotia in your endeavours to improve public health.

The Victorian Order of Nurses for Canada

"A DAY WITH THE V.O.N."

By ISABEL McMANN, YARMOUTH, N.S.

IN bringing to you the work-a-day life of the Victorian Order, we realize that while all of you have no doubt a passing acquaintance with the Victorian Order nurse yet perhaps many of you know very little of the real work she is doing in the homes of the people, laboring seven days a week for a safer motherhood, that our child life may be saved, that suffering may be relieved or even perchance that death may come a little easier in the home of the man who is unable for any reason to purchase professional care for himself.

And so we are going to give you just a simple word picture of a day with a rural nurse, taking you through scenes that are perhaps strange and unfamiliar, and to the doors of folk who are bearing heavy burdens.

1. Our first visit will be in response to an early call. Approaching the house, our first impression is made by the tidy front yard and the gravelled walk, speaking to us of true Canadian thrift and pride. The inside of the home is but an echo of the out. The doctor has gone but the little mother smiles to us her welcome. As we work about she tells us that her husband is working every day but on account of the cut in wages and the high cost of living it is only by very strict economy that they are able to stretch the pay envelope over the grocer, the butcher and the landlord, and that there seems to be nothing left with which to meet the extra demand. But this is one of the joys of the Victorian Order, to be able to give to this little new Canadian care in his first perilous days, guidance around the danger shoals of his first year, and later on as his friend, to teach him through his growing years habits of health that will send him out into the world sound in body and mind to take up the responsibilities developing upon every good Canadian citizen.

2. Now we must hurry along for our next call is by appointment to assist a doctor at operation. Arriving at the house you will find the whole family more or less upset. The patient herself, beset by many fears and misgivings, finds her last ounce of cour-

age gone with the appearance of the first black bag. And so as we work about in preparation we must try first to re-establish the family balance, and then assure the patient that she has nothing to fear. The operation completed, we must make the patient comfortable, put the room in order, and teach some one to carry on until we return.

3. As we leave the house, a doctor passing, spies us and remembers that a baby was born in the night and has had no care. Following his directions, we find ourselves at a shack in the centre of a field. The only door opens directly into the kitchen. The children are huddled together, the smaller ones not yet dressed. The father has gone early to work and the fire is out. The remnants of the breakfast are still on the table. Our first duty is to light a fire and help dress the little ones. Pushing back the dishes on the table, let us see what this family of growing boys and girls have had for their breakfast—a platter of meat holds the central position on the table, a knife on the side of the plate indicates that self service has been the method used. A can of condensed milk, a partial plate of bread, the remnants of a plate of cake, and the dregs of a strong cup of tea at each place. Right here we must stop and fire the first gun in the educational campaign in this home, teaching the children the first requirements for a healthy body and a sound mind. Passing through a curtained doorway and removing the heavy covering from the window placed there to keep out the storm of the night before, we find the little mother lying on an old grey blanket covered with one thin quilt, supplemented by the family coat and sweater.

As we begin our work we find there is no clean linen for the bed, and practically no clothes for baby. As we talk with the mother we learn that her husband is working and earning a fair wage, but weary with the burden of living she has become discouraged and ready to give up, and tells us she almost doesn't care any more. Here we find ourselves face to face with real tragedy—a family of children ready to be set adrift on the sea of life without a rudder, bound for shipwreck on the rocks, and some perhaps to find harbor later on in our penal institutions. If, however, at the end of our period of service we have been able to win our way into the heart and life of this discouraged woman so that she will call us her friend, then we may be able, by much patient, personal effort, to bring this woman back over the long, long road that she has gone to the place where she does care that her family is properly fed and clothed.

Let me take you back to that home some months later as that woman, placing her hand on my shoulder, with tears in her eyes, and her heart just bursting with gratitude, says to me: "Do you know things were slipping from me for a while but life seems worth living again, with someone to help." Before we leave we must find a neighbor who will keep watch on these children until the father returns.

4. And now, we must hurry along and leave all our worries and cares behind, for our next visit is to a little old lady who has long since found life a burden. For eight years she has been carried from her bed to her chair, and how she looks for the daily visit of the nurse, who not only ministers to her physical comfort but brings to her a little of the big outdoors!

5. And now, as we are passing along on our way to lunch we hear our name called out and looking up we see a woman leaning out of a window to ask us if we will come up and see her baby. Entering the kitchen we find the baby in a cradle close up by the kitchen fire. The little face is flushed with fever, and the child tossing restlessly keeps in motion the flies that are swarming just above. We will first carry the baby into a cool airy room and cover from the flies. The mother, with a look of anxiety on her face, tells us that her other baby was just like this and he died. We can only tell her that her baby is very ill and she must get a doctor, and perhaps he may arrange for a little white bed in a big clean hospital ward, in order that the baby may have a chance to live.

6. Hardly is lunch finished when the telephone rings and we are told that a doctor wants us right away. As we near the house we meet a man who inquires if we are going to his house, and with a look of almost despair on his face, tells us they have three new babies at his house. Entering the kitchen, we find the eight picinies already there seated meekly around the wall, having not yet recovered from the shock of having two brothers and one sister left all at one time. In a very small room, off the kitchen, we find the mother with her little new family. Turning as we enter, she says so quietly, "Truly to him that hath shall be given." Bending over the bed the storm from outside can be felt on the back of our neck, and we wonder if this frail little woman under such adverse surroundings will be able to breast the current into the harbor of complete recovery.

The dressing of three babies with not enough clothes for one is no mean problem in mathematics. But if the ones dressed in the

family pillow cases were not artistic, they were at least comfortable. The eldest girl, not yet twelve years of age, is to be nurse and housekeeper for this family of thirteen. So while we are waiting we will teach her the things she must do to keep mother comfortable, and how to care for the babies.

7. Our next call is on a small boy who has been sent home from school with a sore eye. Entering by the front door and finding no one home but the lad, we decide that this is neighborhood visiting hour. Following the sound of running water to a dark corner of the kitchen, we are quickly aroused from any reverie we may have been enjoying, by the splashing of our feet in water which comes over the soles of our shoes, and we find the sink stopped up and running over. The mother meanwhile, advised of our arrival, has returned home. Asking her how she is going to get this water out, she, lifting a cup from the table and suiting her action to the words, says, "We dip it out," and throws it out the window. Following her, we are met by a cloud of flies, thus rudely disturbed from their resting place under the window.

By the time the eye is washed and cared for the rest of the family have returned. Two of the children have enlarged tonsils, and one has little more than half vision, and looking into the face of three little girls we read the same sad story of the mother—mentally deficient. Looking ahead but a few years into the future, we see three more mentally deficient mothers. And thus it goes on, for while we may treat the tonsils and eyesight, yet for this greater problem there seems to be no solution.

8. Just up the street is a new mother whom we left a week ago, and we will stop in and see how she is and invite her to Mothers' Conference.

9. Our next visit is in response to a call from a mother who has taken her baby to the doctor. She says he gave her a piece of paper and she does not understand what it means. So we will take off our coat and show her how to make the formula, teaching her to observe the rules of cleanliness and accuracy. To-morrow we will return and see her make it and be sure she understands.

Daylight by this time is almost gone and we will go along to our home.

10. Retiring a little earlier than usual, we are soon disturbed by the telephone. The doctor wants to know if we will come along and help him as soon as we can.

Finding our way down a side lane by the aid of our flash light, we are able to locate the house by the doctor's car. As we enter the

lower hall, we hear some one above exclaim: "Oh! here is the nurse." The doctor is there and has with him a little girl of some nine or ten years.

After we have cared for the mother and babe, we will wait a few minutes to see that the immediate danger is over. While we are waiting we will teach the child, who is to care for her mother, what to do during the night and what to have ready for us in the morning.

And now, as we make our way home, thinking back over the day—for it has been long and hard—we wonder if after all it has been worth while. Then there flashes over us the remembrance of the hand grasp and the smile that spoke appreciation more truly than words. And we know that if we have helped to lift one burden it was worth while. But while to the nurse alone belongs the joy of the personal touch, yet it is to you, who by your interest and support make this work possible, must come the greater blessing. For into your life will be echoed that old, old message, that has been ringing down through the years: "Inasmuch as you did it unto one of the least of these ye did it unto Me."

Social Background

SOCIAL LEGISLATION—FEDERAL—1922.

The first session of the new Parliament has come and gone.

Many new members are in both Houses. In the Commons there are two new groups, the Progressives and Labour, numbering sixty-seven members. This large body of new men is almost without exception, sympathetic with socially progressive legislation.

We are glad to say that a considerable number of new laws which will be appreciated by our leaders were enacted. Briefly they are as follows:—

1. AMENDMENTS TO THE CRIMINAL CODE:

(1) The law is made more stringent for the prevention of cruelty to animals in transit on railways.

(2) Feeble-minded girls or women of any age are protected against carnal knowledge as previously idiots, imbeciles, insane, and the deaf and dumb were. Penalty—four years imprisonment. And a definition of a feeble-minded person is inserted in Section two taken from the Imperial Statutes, 1913.

(3) The following paragraphs are added as (d) and (e) in subsection 1 of Section 236 which prohibits lotteries, etc., "or (d) disposes of any goods, wares, or merchandise by any game or mode of chance or mixed chance and skill, in which the contestant or competitor pays money or other valuable consideration, or (e) induces any person to stake or hazard any money or other valuables, property or thing on the result of any dice game, shell game, punch board, coin table or on the operation of any Wheel of Fortune."

This makes it clear that the practise of selling cigars, etc., by throwing dice or disposing of candies, etc. by the punch board or inducing others to take chances on the use of any of the instruments named is criminal.

Penalty—Two years and \$2,000.

(4) Sections 227 and 235 are amended so as to make them clear that guessing competitions as carried on by certain newspapers in the West are criminal.

Penalty—One year and \$1,000.

Three other amendments aiming to protect young girls from 14 to 16 more effectively against indecent assault and carnal knowledge were passed by the Commons and struck out by the Senate as on two or three former occasions.

Three other very vital amendments sought were not introduced by the Minister of Justice, viz.:—

- (a) Suppressing the legalized betting houses on race tracks.
 - (b) Prohibiting the publication of betting odds, tips, etc., that may be used by handbook men in their illegal business.
 - (c) Making adultery a crime.
2. *The Opium and Narcotic Drugs Act* was amended making its enforcement more easy, increasing penalties to seven years, and in case of giving drugs to minors, adding whipping at the discretion of the Magistrate, and in the case of aliens convict convicted, directing that they shall be deported after serving sentence.
3. *The Canada Temperance Act* is amended providing for the prohibition of exportation as well as importation of liquor where Provinces so desire.

The mode of procedure is for the Provincial Government to pass an order in council asking the Federal Government to proclaim this amendment in force in the Province concerned and fixing a date.

No referendum is required. By the same means the law may be suspended.

Exportation by distillers and brewers is not affected.

So-called "export warehouses" are prohibited, however.

Transportation is permitted only by common carriers by water or rail except for purposes of delivery from and to such carriers.

It is enacted also that "the court shall take judicial notice of the statutes and law of the Province into which the intoxicating liquor has been or is alleged to have been shipped, taken, brought, carried, or imported contrary to the provisions of their act and for the purposes of this Part IV., the term "intoxicating liquor" shall include all liquor deemed to be intoxicating under the law of the Province into which the liquor was sent, shipped, taken, brought, carried or imported."

This goes into force October 1st, 1922.

A new Part V. of the Canada Temperance Act prohibiting importation into British Columbia or Quebec, excepting to the Government or its Commission was passed by the Commons but struck out in the Senate.

4. A resolution, moved by Mr. W. G. Good, B.A., M.P., favoring the introduction of Proportional Representation in Federal elections was not brought to a vote but there was evidence that it would carry, and the Prime Minister declared his purpose to introduce this method in the Redistribution Act at a future session.



The Provincial Board of Health of Ontario

The returns made of communicable diseases by Local Boards of Health for the month of August compare very favorably with the corresponding month of 1921.

It will be noticed in the comparative table a considerable reduction has taken place in diphtheria, typhoid and tuberculosis. It will also be observed an increase has taken place in Anterior Poliomyelitis (Infantile paralysis) of 70 cases with seven more deaths than in August of last year. The total cases reported for the Province are 92 with 10 deaths. Of this number the city of Hamilton had 54 cases with five deaths—the other 38 cases are rather more sporadic than epidemic being reported from some 20 municipalities with one or two cases each.

The increase in Venereal diseases for the month is due to the fact that some 188 cases occurring in July were not reported until August, hence the apparent increase over that of last year.

COMMUNICABLE DISEASES REPORTED FOR THE PROVINCE FOR THE MONTH OF AUGUST, 1922.

COMPARATIVE TABLE.

Diseases.	1922		1921	
	Cases.	Deaths.	Cases.	Deaths.
Small-pox	31	0	24	0
Scarlet Fever	141	4	114	3
Diphtheria	197	10	264	28
Measles	250	2	50	0
Whooping Cough	163	4	151	6
Typhoid	63	17	152	27
Tuberculosis	113	109	213	109
Infantile Paralysis	92	10	23	3
Cerebro-Spinal-Meningitis	7	6	3	1
Influenzal Pneumonia	—	7	2	2
Primary Pneumonia	—	72	—	83

VENEREAL DISEASES REPORTED BY MEDICAL OFFICERS OF HEALTH.

	Aug. 1922.	Aug. 1921
	Cases.	Cases.
Syphilis	247	144
Gonorrhoea	270	175
Chancroid	7	5
	<hr/> 524	<hr/> 324

News Notes

Dr. R. D. Defries, is acting Professor of Hygiene in the University of Toronto during the absence of Professor J. G. Fitzgerald, who will spend the winter in California, where he will lecture in the University of California.

Two addresses will be given on tuberculosis at the All-Canada Children's Week at Toronto, Sept. 25th to 30th. The major one will be upon the "Distribution of Contact Cases in the Prevention of Tuberculosis and the Infection of Children," the second contribution deals with "The Relation of Tuberculosis to the Financial Aspect of Mothers' Allowances."

On Monday, September 11th, the Canadian Social Hygiene Council held a special meeting in Convocation Hall, Toronto. The speakers were: Dr. A. H. Desloges of Montreal, who spoke on the "Anti-Venereal Campaign" in the Province of Quebec; Dr. Marcel Pinard, Chief Medical Consultant of Hospital Bousicault, who spoke on the "Syphilis and Pregnancy, Organization of Dispensaries to combat Venereal Diseases at Lying-in-Hospitals"; and Dr. Paul Gastou, Chief of the Central Laboratory of St. Louis Hospital for Skin and Syphilis, Paris, France, who spoke on "The Serology of Syphilis."

The All-Canada Children's Week will be held in Toronto, September 25th to 30th.

The Ontario Safety League had a unique exhibit at the Canadian National Exhibition.

The Secretary of the Canadian Tuberculosis Association, along with others, was granted the privilege of broadcasting a tuberculosis message during each week of the Toronto Exhibition. This courtesy and enterprise on the part of the Ontario Provincial Board of Health was very pleasing.

On Friday, September 15th, an organization meeting of the Ottawa Social Hygiene Council was held. Provisional officers in-

clude: Patron, Mayor Plant; President, Dr. F. J. Kidd; Secretary, Dr. G. H. Pearson; Treasurer, Mrs. H. S. Campbell.

A splendid tuberculosis conference of agencies and workers of the New England States has been arranged to meet at Poland Springs, Maine; during the last week of September. The Secretary of the Canadian Tuberculosis Association has been asked to contribute an address upon "Some Canadian Economic Phases," in a symposium dealing with "Public Health and the Public."

The thirteenth annual meeting of the American Child Hygiene Association will be held in Washington, D.C., October 12-14th. Speakers from Canada include Dr. W. T. Bell and Miss Mary Power of Toronto.

The first number of the Canadian Tuberculosis Association Bulletin has just been distributed to over 20,000 recipients in English and 3,000 in French. There are many features of interest in it, including a digest of tuberculosis deaths for eight of the nine provinces of Canada for 1921.

Dr. J. W. S. McCullough, Chief Officer of Health of Ontario, has just returned after a two months' visit to England, where he took this opportunity of studying the Public Health System in operation there. He will make a report thereupon to the Ontario Government. During his visit the Chief Officer addressed several societies and attended the annual banquet of the Royal Society of Medicine, the Conference of the Royal Sanitary Institute, of which he is a Fellow, at Bournemouth, and was given a complimentary luncheon by the National Council for Combating Venereal Disease.

Dr. McCullough reports a wet and cool summer in England, but says that notwithstanding unemployment and the burden of heavy taxes the English people are cheerful and settling down to business after the war. He predicts that London will soon resume her old position as the "Centre of the World."

Editorial

VIVISECTION.

THE anti-vivisector, the anti-vaccinationist and cranks in general are always with us. This statement is inspired by an announcement that a Doctor Hadwen of London, England, heralded as a prodigy of learning is in the near future to educate a Toronto audience on the all important subject of vivisection. Doubtless other Canadian audiences will be similarly favored.

There are one or two things which this gentleman and his friends should, it would seem, bear in mind. Among other things that they might in all fairness announce to their audiences should be the fact that if it were not for vivisection in some form the great majority of the great discoveries upon which modern preventive medicine is based would be denied to the human race. For instance, previous to the discovery of anti-toxin the mortality from Diphtheria was about thirty-five per cent. From Diphtheria treated immediately with anti-toxin there is no mortality whatever. Without vivisection there would be no anti-toxin. Tetanus in the early stages of the late war was a serious problem in the army. Tetanus bacilli abounded in the battlefields of France and many wounded soldiers succumbed not to wounds but to this dread infection. With the advent of tetanus anti-toxin—much of which came from our own Connaught Laboratories—the picture was changed and the routine administration of tetanus anti-toxin to wounded soldiers eliminated tetanus as a cause of death. Tetanus anti-toxin too is made possible because of vivisection. Again—and one can only mention a few of the values of vivisection—the modern diagnosis and treatment of Syphilis depends on various types of vivisection. The Wassermann reaction, without which we would scarcely recognize syphilis as a public health problem, depends on vivisection. Salvarsan, the great curative agent depended on vivisection for its discovery and depends on it for its preparation. And so one might go on down through the whole field of preventive medicine.

But to cover such details for the benefit of our friends, the anti-vivisectors and the anti-vaccinationists, is after all to waste one's wind. Fanticism is an emotion—not an intellectual process, and like love or hate, or ambition, it brooks no opposition. Far be it for any of us, mere specialists though we may be in the field of scientific disease prevention, to make any serious attempt to frustrate the pious enthusiasm of well meaning, though mistaken zealots. Doubtless in their enthusiasm, even though nowhere else, they will find their reward.

